

CLAIM AMENDMENTS

Please amend the claims of the above-identified application so as to read as follows:

1-25. ~~(Canceled)~~, without prejudice)

26. (Currently Amended) A base station for use in a space-division multiplex optical wireless local area network for interconnecting a plurality of terminals, the base station comprising:
a light receiving function of an angle-diversity type receiver; and
a multi-beam transmitter for outputting a plurality of beams,
wherein the multi-beam transmitter includes a plurality of optical transmitters so as to form a plurality of space cells each having a predetermined size, and each of the plurality of optical transmitters includes at least one LD or at least one LED as a light source.

27. (Currently Amended) A base station according to claim 26 for use in a space-division multiplex optical wireless local area network for interconnecting a plurality of terminals, the base station comprising:
a light receiving function of an angle-diversity type receiver; and
a multi-beam transmitter for outputting a plurality of beams,
wherein in the multi-beam transmitter, directions of the plurality of optical transmitters are set to specific directions different from each other so as to form a plurality of space cells each having a predetermined size.

28. (Currently Amended) A base station according to claim 26 for use in a space-division multiplex optical wireless local area network for interconnecting a plurality of terminals, the base station comprising: a ~~light receiving function of an angle-diversity type receiver~~; and a multi-beam transmitter for outputting a plurality of beams, wherein in the multi-beam transmitter, directional half-value angles of the plurality of optical transmitters are set to specific angles different from each other so as to form a plurality of space cells each having a predetermined size.
29. (Previously Presented) A base station according to claim 28, wherein a directional angle (half-value angle) ϕ of each of a light source of each of the plurality of optical transmitters of the multi-beam transmitter is represented by $\phi = C \times \theta$ where C is a constant in a range from 0.70 to 1.00, and θ is an angle of each of the plurality of space cells each having a predetermined size.
30. (Currently Amended) A base station according to claim 26, wherein the ~~optical receiver of an angle-diversity type receiver~~ includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.
31. (Previously Presented) A base station according to claim 26, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

32. (Currently Amended) A space-division multiplex optical wireless local area network for interconnecting a plurality of terminals via a base station, the local area network comprising:

a ~~light receiving function of an angle-diversity type receiver~~; and

a multi-beam transmitter for outputting a plurality of beams,

wherein the multi-beam transmitter includes a plurality of optical

transmitters so as to form a plurality of space cells each having a

predetermined size, and each of the plurality of optical transmitters

includes at least one LD or at least one LED as a light source.

C | 33. (Currently Amended) A space-division multiplex optical wireless local area network according to claim 32, wherein each of the plurality of terminals includes an optical transmitter having at least one light source, ~~an optical the angle-diversity receiver having~~ has an optical filter for selectively attenuating light transmitted from the transmitter of the terminal, and means for easily removing the optical filter ~~are provided~~.

34. (Previously Presented) A space-division multiplex optical wireless local area network according to claim 33, wherein each of the plurality of beams output from the multi-beam transmitter of the base station includes a spectrum component having a sufficient intensity different from the spectrum components of any one of wavelength bands used by each of the plurality of terminals.

35. (Previously Presented) A space-division multiplex optical wireless local area network according to claim 33, wherein each of the plurality of beams output from the multi-beam transmitter of the base station includes at least one wavelength band used by the plurality of terminals and a spectrum component having a sufficient intensity other than the at least one wavelength band.

36. (Withdrawn) An optical wireless communication method for use in a space-division multiplex optical wireless local area network for interconnecting a plurality of terminals via a base station, wherein before communication between the base station and a specific terminal among the plurality of terminals, the method executes the steps of:

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- (a) the base station detecting a communication request light signal transmitted from the specific terminal;
 - (b) the base station performing an operation based on the communication request signal to obtain data indicating a light signal intensity of the communication request signal or data indicating a light signal/noise intensity ratio, and recognizing a space cell, the specific terminal being positioned in the space cell;
 - (c) the base station notifying the specific terminal of the data indicating a light signal intensity of the communication request signal or the data indicating a light signal/noise intensity ratio;

- (d) a direction of an optical transmitter-receiver of the specific terminal being manually adjusted by a user while recognizing the data indicating a light signal intensity of the communication request signal or the data indicating a light signal/noise intensity ratio; and
- (e) the base station transmitting a signal indicating communication permission to the specific terminal when a value of the data indicating a light signal intensity of the communication request signal or a value of the data indicating a light signal/noise intensity ratio reaches a predetermined value.

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37. (Currently Amended) A base station according to claim 27, wherein the optical ~~receiver of an angle-diversity type receiver~~ includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.

38. (Currently Amended) A base station according to claim 28, wherein the optical ~~receiver of an angle-diversity type receiver~~ includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.

39. (Currently Amended) A base station according to claim 29, wherein the optical ~~receiver of an angle-diversity type receiver~~ includes a lens system dedicated to reception having a spatial resolution higher than a spatial resolution of the plurality of space cells each having a predetermined size.

40. (Previously Presented) A base station according to claim 27, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

41. (Previously Presented) A base station according to claim 28, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

42. (Previously Presented) A base station according to claim 29, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.

43. (Previously Presented) A base station according to claim 30, wherein a radius of a space cell provided by each of the plurality of optical transmitters is in a range from 20 cm to 100 cm at a predetermined maximum possible distance for communication.
